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EDUCATION

- 2006 Oregon State University, College of Oceanic and Atmospheric Sciences
 Ph.D. in Oceanography
 Dissertation: Numerical and assimilative studies of the equatorial Pacific cold tongue
 Advisor: Prof. Robert N. Miller
- 1999 University of Miami, Rosenstiel School of Marine and Atmospheric Science
 M.S. in Applied Marine Physics
 Thesis: Model skill assessment in the Louisiana-Texas (LATEX) shelfbreak zone
 Advisor: Prof. Christopher N. K. Mooers
- 1995 University of Miami
 B.S. Cum Laude in Applied Mathematics, Pure Physics

PROFESSIONAL EXPERIENCE

- 2011-2016 University of Miami, Cooperative Institute for Marine and Atmospheric Studies
 NOAA/AOML/Physical Oceanography Division
 CIMAS Associate Scientist
- 2008-2011 University of Miami, Cooperative Institute for Marine and Atmospheric Studies
 NOAA/AOML/Physical Oceanography Division
 CIMAS Assistant Scientist
- 2005-2008 National Research Council
 NOAA/PMEL/Ocean Climate Research Division
 Postdoctoral Fellow
- 2005, 2008 University of Washington, Joint Institute for the Study of the Atmosphere and Ocean
 Postdoctoral Fellow
- 1998-2005 Oregon State University, College of Oceanic and Atmospheric Sciences
 Graduate Research Assistant
- 2000, 2002, 2005 Oregon State University, College of Oceanic and Atmospheric Sciences
 Graduate Teaching Assistant

1995-1998 University of Miami, Rosenstiel School of Marine and Atmospheric Science
Graduate Research Assistant

1992-1995 University of Miami, Rosenstiel School of Marine and Atmospheric Science
Undergraduate Research Assistant

FUNDING

2016 Collaborative Research: Extratropical Triggering of ENSO Events Through The Trade-Wind Charging Mechanism, NSF-CLD, 01/01/16-12/31/18, \$343,452, pending.

2016 South Atlantic-North Atlantic Meridional Overturning Circulation (MOC) linkages: Analysis of the upper and lower limbs with in situ moored instruments, NOAA, 07/01/16-06/30/19, \$353,031.

2014 Variability of the South Atlantic Subtropical Gyre, NASA, 05/01/14-04/30/17, \$346,494 (6 mm/year)

2014 Southwest Atlantic Meridional Overturning Circulation ("SAM"), NOAA, 10/01/15-09/30/16 (0.25 mm/year)

2014 PIRATA Northeast Extension, NOAA, 10/01/15-09/30/16 (3 mm/year)

2013 South Atlantic Meridional Overturning Circulation: Pathways and Modes of Variability, NOAA, 09/01/13-8/31/16, \$222,723 (3 mm/year)

2010 Collaborative Research: Global Impact of Eddies on Inertial Oscillations of the Mixed Layer. NSF- OCE-1031278, 10/01/10-09/30/14, \$66,313 (1 mm/year)

AWARDS

2014 NOAA/AOML/PhOD Outreach Award

2006 Selected to attend Physical Oceanography Dissertation Symposium (Honolulu, HI)

2005 National Research Council Postdoctoral Fellow

2003 Wayne Burt Excellence in Physical Oceanography Award (Oregon State University)

1995 Distinguished Undergraduate in Mathematics (University of Miami)

1995 Distinguished Undergraduate in Physics (University of Miami)

1994 NSF Incentives for Excellence Scholarship (University of Miami)

1994 Phi Beta Kappa Honor Society (University of Miami)

1993 Golden Key National Honor Society (University of Miami)

PUBLICATIONS (PEER-REVIEWED)

- (1) Rugg, A., G. R. Foltz, and **R. C. Perez**, 2016: Importance of mixed layer dynamics for tropical North Atlantic interannual sea surface temperature variability. *J. Clim.*, *accepted*.
- (2) Elipot, S., R. Lumpkin, **R. C. Perez**, J. M. Lilly, J. Early, and A. Sykulski, 2016: A global surface drifter dataset at hourly resolution. *J. Geophys. Res.*, 121, doi:10.1002/2016JC011716.
- (3) Lumpkin, R., L. Centurioni, and **R. C. Perez**, 2016: Assessing the global drifter array: Observing system requirements. *JAOT*, 33, 685-695, doi:10.1175/JTECH-D-15-0255.1.
- (4) Anderson, B. T., and **R. C. Perez**, 2015: ENSO and Non-ENSO induced charging and discharging of the equatorial Pacific. *Clim. Dyn.*, 45, 2309-2327, doi:10.1007/s00382-015-2472-x.
- (5) Garzoli, S. L., S. Dong, R. Fine, C. Meinen, **R. C. Perez**, C. Schmid, E. van Sebille, and Q. Yao, 2015: The fate of the Deep Western Boundary Current in the South Atlantic. *Deep Sea Res.*, 103, 125-136, doi:10.1016/j.dsr.2015.05.008.
- (6) **Perez, R. C.**, M. O. Baringer, S. Dong, S. L. Garzoli, M. Goes, G. J. Goni, R. Lumpkin, C. S. Meinen, R. Msadek, and U. Rivero, 2015: Measuring the Atlantic meridional overturning circulation. *Mar. Tech. Soc. Journal*, 49(2), 167-177, doi:10.4031/MTSJ.49.2.14.
- (7) Johns, E. M., B. A. Muhling, **R. C. Perez**, F. E. Müller-Karger, N. Melo, R. H. Smith, J. T. Lamkin, T. L. Gerard, and E. Malca, 2014: Amazon River water in the northeastern Caribbean Sea and its effect on larval reef fish assemblages during April 2009. *Fisheries Oceanogr.*, 23:6, 472-494, doi:10.1111/fog.12082.
- (8) **Perez, R. C.**, V. Hormann, R. Lumpkin, P. Brandt, W. E. Johns, F. Hernandez, C. Schmid, and B. Bourlès, 2014: Mean meridional currents in the central and eastern equatorial Atlantic. *Clim. Dyn.*, 43, 2943-2962, doi:10.1007/s00382-013-1968-5.
- (9) Anderson, B. T., **R. C. Perez**, A. Karspeck, 2013: Triggering of El Niño onset through the trade wind-induced charging of the equatorial Pacific. *Geophys. Res. Lett.*, 40, 1212-1216, doi:10.1002/grl.50200.
- (10) Garzoli, S. L., M. O. Baringer, S. Dong, **R. C. Perez**, and Q. Yao, 2013: South Atlantic meridional fluxes. *Deep Sea Res. I*, 71, 21–32, doi: 10.1016/j.dsr.2012.09.003.
- (11) Goes, M., G. J. Goni, V. Hormann, and **R. C. Perez**, 2013: Variability of the Atlantic off-equatorial eastward currents during 1993-2010 using a synthetic method. *J. Geophys. Res.*, 118, 3026-3045, doi:10.1002/jgrc.20186.

- (12) Hormann, V., R. Lumpkin, and **R. C. Perez**, 2013: A generalized method for estimating the structure of the equatorial Atlantic cold tongue: Application to drifter observations. *Journal of Atmos. Oceanic Technol.*, 30, 1884–1895, doi:10.1175/JTECH-D-12-00173.1.
- (13) Meinen, C. S., S. Speich, **R. C. Perez**, S. Dong, A. R. Piola, S. L. Garzoli, M. Baringer, S. Gladyshev, and E. Campos, 2013: Temporal variability of the meridional overturning circulation at 34.5°S: Results from two pilot boundary arrays in the South Atlantic. *J. Geophys. Res.*, 118, 6461–6478, doi:10.1002/2013JC009228.
- (14) Meinen, C. S., A. Piola, **R. C. Perez**, and S. L. Garzoli, 2012: Deep Western Boundary Current transport variability in the South Atlantic: Preliminary results from a pilot array at 34.5°S. *Ocean Science*, 8, 1041–1054, doi:10.5194/os-8-1041-2012.
- (15) **Perez, R. C.**, R. Lumpkin, W. E. Johns, G. R. Foltz, and V. Hormann, 2012: Interannual variations of Atlantic tropical instability waves. *J. Geophys. Res.*, 117, C03011, doi:10.1029/2011JC007584.
- (16) **Perez, R. C.**, S. L. Garzoli, C. S. Meinen, and R. P. Matano, 2011: Geostrophic velocity measurement techniques for the meridional overturning circulation and meridional heat transport in the South Atlantic. *Journal of Atmos. Oceanic Technol.*, 28, 1504–1521, doi:10.1175/JTECH-D-11-00058.1.
- (17) **Perez, R. C.**, M. F. Cronin, and W. S. Kessler, 2010: Tropical cells and a secondary circulation near the northern front of the equatorial Pacific cold tongue. *J. Phys. Oceanogr.*, 40, 2091–2106, doi:10.1175/2010JPO4366.1.
- (18) **Perez, R. C.**, and W. S. Kessler, 2009: The three-dimensional structure of tropical cells in the central equatorial Pacific ocean. *J. Phys. Oceanogr.*, 39(1), 27–49, doi:10.1175/2008JPO4029.1.
- (19) **Perez, R. C.**, D. B. Chelton, and R. N. Miller, 2005: The effects of wind forcing and background mean currents on the latitudinal structure of equatorial Rossby waves. *J. Phys. Oceanogr.*, 35(5), 666–682, doi:10.1175/JPO2714.1.

PUBLICATIONS (NON-PEER-REVIEWED)

- (1) Danabasoglu, G., R. Curry, A. Karspeck, C. Meinen, R. Msadek, M. Patterson, **R. Perez**, A. Schmittner, L. Thompson, and S. Yeager, 2015: 2014 US AMOC Science Team Annual Report on Progress and Priorities. *Report 2015-1*, US CLIVAR Project Office, 165 pp.
- (2) **Perez, R. C.**, 2014: Autobiographical sketches of women in oceanography. *Oceanography Supplement*, 27(7), 186.
- (3) Ansorge, I. J., M. O. Baringer, E. J. D. Campos, S. Dong, R. A. Fine, S. L. Garzoli, C. S. Meinen, **R. C. Perez**, A. R. Piola, M. J. Roberts, S. Speich, J. Sprintall, T. Terre, M. A. Van de

Berg, 2014: Basin-wide oceanographic array bridges the South Atlantic. *EOS*, 95, 53-54, doi: 10.1002/2014EO060001.

- (4) Garzoli, S., P. Abrahamsen, I. Ansorge, A. Biastoch, E. Campos, M. Mata, C. Meinen, J. Pelegri, **R. Perez**, A. Piola, C. Reason, M. Roberts, S. Speich, J. Sprintall, R. Watts, and all of the SAMOC IV participants, 2012. South Atlantic Meridional Overturning Circulation (SAMOC) – Fourth Workshop. *CLIVAR Exchanges*, No. 58 pp. 2-4 (Unpublished manuscript).
- (5) Thompson, L., **R. C. Perez**, and A. E. Shevenell, 2011: Closed ranks in oceanography. *Nature Geoscience*, doi:10.1038/ngeo1113.
- (6) Thompson, L., **R. C. Perez**, and A. E. Shevenell, 2011: Reply to “Not just family matters”. *Nature Geoscience*, doi:10.1038/ngeo1165.
- (7) Perez, R. C., 2006: Numerical and assimilative studies of the equatorial Pacific cold tongue. Ph. D. Dissertation, Oregon State University, Corvallis, Oregon.
- (8) Perez, R. C., 1998: Evaluation of the DYNALYSIS Gulf of Mexico Princeton ocean model's skill in simulating the Louisiana-Texas shelf circulation during the LATEX field program (April 1992 to March 1994). University of Miami technical report, No. RSMAS98-004.

SELECTED PRESENTATIONS (LAST FIVE YEARS)

US CLIVAR meeting (July 2016)

“Future of deep moored technologies and their synthesis with other observations ”
“Global Drifter Program status and future directions”

PhOD Retreat seminar (May 2016)

“PhOD’s Scientific Communications”

American Geophysical Union Ocean Sciences Meeting (February 2016, poster)

“Circulation and water mass variability in the South Atlantic subtropical gyre”

NOAA/AOML/PhOD Seminar (November 2015)

“Atlantic tropical cells and TIWs”

Ronald H. Brown Users Meeting (October 2015)

“FY17 PIRATA NorthEast Extension Cruise Requirements”

US CLIVAR meeting (August 2015)

“Deep Argo”
“Tropical Atlantic and Indian Ocean Moored Arrays: PIRATA and RAMA”
“AMOC, AMO, and AtlantOS”

UK RAPID - US AMOC International Science meeting (July 2015)

“Circulation and Water Mass Variability in the South Atlantic”

NOAA Climate Observations Division meeting (June 2015, poster)
“South Atlantic Meridional Overturning Circulation: Modes of Variability and Water Mass Pathways”

NOAA/AOML/PhOD Seminar (January 2015)
“Observed and simulated variability in the South Atlantic”

SAMOC V Workshop (December 2014)
“Model-data comparisons of AMOC seasonal cycle mechanisms at 34.5S”

CIMAS Review (September 2014)
“Mean meridional currents in the central and eastern equatorial Atlantic”

US AMOC Science Team meeting (September 2014)
“The SAMOC (South Atlantic Meridional Overturning Circulation) program”
“Simulating MOC water mass pathways and variability in the South Atlantic” (poster)

Broward County young professional community/Becker-Poliakoff (July 2014)
“Sea Level Rise”

US CLIVAR meeting (July 2014)
“SAMOC program update”
“Climate variability in under sampled regions: tropical and southern Atlantic”

American Geophysical Union Ocean Sciences Meeting (February 2014)
“Mean meridional currents in the central and eastern equatorial Atlantic”

NOAA/AOML/PhOD Seminar (January 2014)
“Mean meridional currents in the equatorial Atlantic”

UK RAPID - US AMOC International Science meeting (July 2013)
“Sensitivity of the MOC seasonal cycle to wind forcing”

NOAA/AOML/PhOD Seminar (January 2013)
“Triggering of El Niño onset through the trade-wind induced charging of the equatorial Pacific”

Workshop on Inertial Oscillation Physics and Lagrangian Methods (November 2012)
“Structure of the flow within the Atlantic tropical cells and across the northern cold tongue front”

TAV/PIRATA meeting (September 2012, poster)
“Structure of the Atlantic cold tongue and meridional flow within the tropical cells”

US AMOC meeting (August 2012, poster)

"Inter-hemispheric comparison of meridional overturning circulation and meridional heat transport using high-resolution coupled climate and ocean-only simulations"

NOAA/AOML/PhOD Science Retreat (March 2012)

"The mean structure of Atlantic tropical cells"

NOAA/AOML/PhOD Seminar (November 2011)

"Geostrophic velocity measurement techniques for the MOC and MHT in the South Atlantic"

SAMOC 4 Workshop (September 2011)

"Geostrophic velocity measurement techniques for the MOC and MHT in the South Atlantic",

"SAMBA: South Atlantic MOC Basin-wide Array along 34.5S"

Global impact of eddies on inertial oscillations of the mixed layer Workshop (February 2011)

"Recent changes to the drifter data set"

NOAA/AOML/PhOD Science Retreat (February 2011)

"Interannual variations of tropical instability waves"

NOAA/GFDL seminar (February 2011)

"Towards observing the Meridional Overturning Circulation in the South Atlantic"

US AMOC meeting (June 2010)

"Design and testing of a MOC monitoring array in the South Atlantic"

PROFESSIONAL SERVICE ACTIVITIES

- | | |
|------|---|
| 2016 | Co-organized South Atlantic Meridional Overturning Circulation (SAMOC) logistics meeting in New Orleans, LA, and a SAMOC science session at the Ocean Sciences meeting. |
| 2015 | Co-chair for the US CLIVAR Phenomena, Observations, and Synthesis (POS) panel. |
| 2015 | Served on a NOAA grant proposal panel in <i>November 2015</i> . |
| 2015 | Became Chair of US AMOC Task Team 1. |
| 2015 | Selected to serve as breakout session leader for NOAA Climate Observation Division meeting in College Park, MD on 15-17 June 2015. |
| 2014 | Selected to serve as an organizer for the RAPID – USAMOC international workshop in Bristol, UK on 21-24 July 2015. |
| 2014 | Selected to serve as vice-chair for US AMOC Task Team 1 and as member of the Executive Committee. |

- 2014 Member of the US AMOC Science Team.
- 2014 Selected to serve on the US CLIVAR Phenomena, Observations, and Synthesis (POS) panel.
- 2013 Co-organized a meeting to discuss logistics and planning for a trans-basin array to measure the Meridional Overturning Circulation (MOC) along 34.5°S in the Atlantic at NOAA/AOML in Miami, FL on 29-31 January 2013 (with Chris Meinen and Shenfu Dong).
- 2012 Co-organized a meeting on Inertial Oscillation Physics and Lagrangian Methods at NOAA/AOML in Miami, FL on 7-9 November 2012 (with Jonathan Lilly and Rick Lumpkin).
- 2012-2014 Member of the NOAA/AOML/PhOD award committee.
- 2011 Chaired a session on “Tropical Atlantic Variability” at the NOAA/AOML/PhOD Science Retreat in Miami, FL on 15-16 February 2011.
- 2010 Chaired a session on the “Upper Ocean Circulation in Equatorial Cold Tongues” at the 2010 Ocean Sciences Meeting in Portland, Oregon on 22-26 February 2010 (with Rick Lumpkin, Meghan Cronin, William Kessler).
- 2010-2013 CIMAS/AOML Liaison
- 2008-2015 Served as a reviewer for the following journals: Dynamics of Atmospheres and Oceans, Geophysical Research Letters, Journal of Geophysical Research, Journal of Climate, Climate Dynamics, Journal of Physical Oceanography, Ocean Modelling; and, funding agencies: the National Science Foundation, the Brazilian funding agency FAPESP, and the South African funding agency NRF.

UNIVERSITY SERVICE ACTIVITIES

- 1999-2003 Oregon State University, College of Oceanic and Atmospheric Sciences
Physical Oceanography Faculty Hiring Committee, Student representative (Fall 2003)
Promotion and Tenure Committee, Student representative (Fall 2002)
Student Advisory Committee, Division representative (2002-2003)
Student Fees Committee, Member (2001-2002)
Computer Committee, Student representative (2001-2002)
Graduate Student Senator (2000-2002)
Instructional Programs Committee, Student representative (1999-2001)
- 1995-1998 University of Miami, Rosenstiel School of Marine and Atmospheric Science
Marine Science Graduate Student Organization, Vice President (1997-1998)
Alumni Association, Student representative (1997-1998)
Student Travel Fund Committee, Division representative (1997-1998)

Marine Science Graduate Student Organization, Division representative (1995-1996)

OUTREACH ACTIVITIES

- | | |
|------|--|
| 2016 | Density and convection current demonstrations for AOML My Brother's Keeper event (Mar 2016). |
| 2016 | Mentor for MPOWIR peer group |
| 2016 | Participated on a panel in an MPOWIR Townhall at the Ocean Sciences Meeting (Feb 2016). |
| 2016 | Gave an interview to high school students working on a student film project on climate change (Feb 2016). |
| 2016 | Participated in the Bring Your Child to Work Day (Feb 2016). |
| 2015 | Interview for National Geographic for the story "Century-Old Message in a Bottle Returned to Sender" (http://news.nationalgeographic.com/2015/08/150825-message-bottle-lego-rubber-ducky-drifter-oceans-currents-science/) (Aug 2015). |
| 2015 | Mentored two MAST high school students for 3 days on developing a YouTube video on density and convection currents (Jul 2015). |
| 2015 | Mentoring Hollings Undergraduate Scholar, Allyson Rugg (May – Aug 2015). |
| 2015 | Density and convection current demonstrations for AOML Open House (May 2015). |
| 2015 | Participated in the Bring Your Child to Work Day (Apr 2015). |
| 2015 | Attended the AAAS Communicating Climate Science Workshop (Mar 2015). |
| 2015 | Career Day presentations at Sunset Elementary (Feb 2015). |
| 2014 | Career Day presentations at Frank C. Martin International K-8 Center (Dec 2014). |
| 2014 | Conducted a density demonstration and effect of temperature and salt on density for Disability Awareness event at NOAA/AOML (Nov 2014). |
| 2014 | Gave a presentation on "Sea Level Rise" during a panel discussion entitled "The Future of Fort Lauderdale: Protecting our Paradise against Rising Seas and Stronger Storms" for the Broward County young professional community (Jul 2014). |
| 2014 | Mentored three MAST high school students for a week on developing a demonstration on buoyancy (Jul 2014). |

- 2014 Presentation for NOAA/AOML Bring Your Child to Work Day. Demonstration on convective ocean currents.
- 2014 Presentation for Immaculate Conception School 3rd to 5th grade students on the importance of the oceans. Demonstration on convective ocean currents.
- 2013 Guest lecturer for dual-enrollment college and high school Oceanography class at the Maritime and Science Technology (MAST) Academy.
- 2013,2014 Career Day presentation at Somerset Academy Silver Palms School to middle/high school students.
- 2013 ITWomen presentation for 9-12th grade students on career paths in NOAA at South Broward high school.
- 2013 Science judge for National Ocean Science Bowl Eastern Florida Regional Competition.
- 2013 Attended the Center for Ocean Sciences Education Excellence Florida Presentation Bootcamp course.
- 2011 Organized ocean pressure demonstration for students using styrofoam cups for students at the French American School of Miami (a local primary school).
- 2010-2015 Participated and/or conducted density demo/presentation in an annual outreach event hosted by University of Miami Rosenstiel School of Marine and Atmospheric Science and the American Association of University Women: Exploring Marine Science Day for 6-7th grade girls.
- 2007-2015 Involved with the Mentoring Physical Oceanographic Women to Increase Retention (MPOWIR).

CRUISE LEADERSHIP

- 2013 PIRATA Northeast Extension Cruise (R/V Ronald H. Brown)
Co-chief scientist
- 2012 Fall Western Boundary Time Series Cruise (R/V Endeavor)
Co-chief scientist

CITIZENSHIP

United States of America